Ashwin Balakrishna

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BACKGROUND I am excited about algorithms for data-driven decision making. I am currently a research scientist at Google DeepMind working on building foundation models for general purpose robotic manipulation. I am particularly interested in bridging vision and language foundation models with decision-making algorithms which can actively interact with users and improve based on experience. **EDUCATION** UC Berkeley, Berkeley, CA Aug 2018 - May 2022 *Ph.D.* in Computer Science GPA: 3.97/4.00 Thesis: Scalable Supervision for Safe and Efficient Online Robot Learning Advisor: Ken Goldberg California Institute of Technology, Pasadena, CA Sep 2014 - Jun 2018 Bachelor of Science in Electrical Engineering GPA: 3.97/4.00 Advisors: Steven Low and Hyuck Choo **INDUSTRY** Google DeepMind, Senior Research Scientist 2024 - Present **EXPERIENCE** Building a robot brain with Gemini Toyota Research Institute, Research Scientist 2023 - 2024 Building a robot foundation model Nuro, Research Scientist 2022 - 2023Applying reinforcement learning for motion planning Toyota Research Institute, Research Intern 2021 Research in reinforcement learning **SpaceX**, Software Engineering Intern (Avionics) 2017Power system analysis automation for Falcon 9 rocket **PUBLICATIONS** [47] Gemini Robotics Team. Gemini Robotics: Bringing AI into the Physical World. Preprint 2025. [46] Jensen Gao*, Suneel Belkhale*, Sudeep Dasari, Ashwin Balakrishna, Dhruv Shah, Dorsa Sadigh. A Taxonomy for Evaluating Generalist Robot Policies. Preprint 2025.[45] Joey Hejna, Suvir Mirchandani, Ashwin Balakrishna, Annie Xie, Ayzaan Wahid, Jonathan Tompson, Pannag Sanketi, Dhruv Shah, Coline Devin, Dorsa Sadigh. Robot Data Curation with Mutual Information Estimators. Robotics Science and Systems (RSS) 2025.

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Pushing with Single-point and Multi-point Contacts, Conference on Automation Sciences and Engineering (CASE) 2019.

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[7] Frank L Brodie, David A Ramirez^{*}, Sundar Pandian^{*}, Kelly Woo, **Ashwin Bal-akrishna**, Eugene De Juan, Hyuck Choo, Robert H Grubbs. Novel positioning sensor with real-time feedback for improved postoperative positioning: pilot study in control subjects. *Clinical Ophthalmology* 2017.

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* = equal contribution

TEACHING Teaching Assistant, UC Berkeley

	CS 189: Introduction to Machine Learning	
	Teaching Assistant,, UC Berkeley	Summer 2021
	CS 188: Introduction to Artificial Intelligence	
	Teaching Assistant,, California Institute of Technology	Fall 2017
	EE 111: Signal-Processing Systems and Transforms	
AWARDS & HONORS	UC Berkeley Outstanding Graduate Student Instructor Award	2022
	Qualcomm Innovation Fellowship Finalist	2021
	Timothy B. Campbell Innovation Award (Berkeley EECS)	2021
	Apple AI/ML PhD Fellowship Nomination (Berkeley EECS)	2020
	National Science Foundation Graduate Research Fellowship	2018
	Henry Ford II Scholar Award (Top GPA in EE at Caltech)	2017
PROFESSIONAI	Academic Services:	
ACTIVITIES	Student Engagement Co-Chair, CoRL 2022	
	Organizer of Safe and Robust Control Workshop, NeurIPS 2021	
	Reviewing for CoRL, ICML, NeurIPS, RA-L, ICRA, IROS, CASE 2019-2022	
	Berkeley AI Research Admissions Reader 2019, 2021	
	Berkeley PhD Buddy Program Mentoring 2020-2021	
	Berkeley Be a Scientist Program Volunteer 2018	
	<i>Mentoring:</i> I have been fortunate to work with the following undergraduate and masters students in the AUTOLAB at UC Berkeley:	
	Albert Wilcox (2020-2022); Next: PhD Student at Georgia Tech	
	Leitan Fu (2020-2022); Next: PhD Student at UC Berkeley	
	Satvik Sharma (2020-2022); Next: PhD Student at Stanford	
	Priya Sundaresan (2019-2021); Next: PhD Student at Stanford	
	Jennifer Grannen (2019-2021); Next: PhD Student at Stanford	
	Michael Luo (2020-2021); Next: PhD Student at UC Berkeley	
	Bobby Yan (2020-2021); Next: PhD Student at Stanford	
	Ryan Hoque (2019-2020); Next: PhD Student at UC Berkeley	
	Zaynah Javed (2020-2022); Next: Facebook	
	Shivin Devgon (2019-2021); Next: Singular Genomics	
	Aditya Ganapathi (2019-2021); Next: Grabango	
	Zisu Dong (2018-2019); Next: Facebook	
	David Wang (2018-2019); Next: Google	
	Arsh Zahed (2018-2019); Next: NVIDIA	
	Felix Li (2018-2019); Next: Undergraduate at UC Berkeley	
	Vainavi Viswanath (2019-2021); Next: MS Student at UC Berkeley	
	Kaushik Shivakumar (2019-2021); Next: MS Student at UC Berkeley	